

WHAT IS CLAIMED IS:

1. A system for iontophoretic transdermal delivery of one or more therapeutic agents into a user's skin, comprising:

5 a first end comprising a first reservoir for containing one or more therapeutic agents;

a second end comprising a second reservoir for containing one or more therapeutic agents; and

a connecting portion coupling the first end to the second end, the connecting portion housing:

10 a self-contained power source for generating electric current, the power source comprising a first terminal and a second terminal;

at least a portion of a first electrode for electrically coupling the first terminal of the power source to the first reservoir, the first electrode operable to conduct electric current between the power source and the first reservoir to ionize the one or more therapeutic agents contained within the first reservoir for iontophoretic transdermal delivery into the user's skin; and

15 at least a portion of a second electrode for electrically coupling the second terminal of the power source to the second reservoir, the second electrode operable to conduct electric current between the power source and the second reservoir to ionize the one or more therapeutic agents contained within the second reservoir for iontophoretic transdermal delivery into the user's skin;

the system adapted to be used in an extended or non-extended state.

2. The system of Claim 1, wherein the first and second reservoirs are adapted to deliver one or more therapeutic agents to one or more portions of a user's body substantially simultaneously.

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3. The system of Claim 1, further comprising a protective covering associated with the connecting portion and adapted to be removably coupled to a hypoallergenic adhesive on a bottom of the connecting portion, the hypoallergenic adhesive adapted to removably couple the system to a portion of the user's body.

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4. The system of Claim 1, further comprising a protective tab associated with each reservoir, each tab adapted to be removably coupled to a hypoallergenic adhesive associated with its reservoir and further adapted to protect and provide protection from the therapeutic agents in its reservoir during application of the system to the user's skin, the hypoallergenic adhesive adapted to removably couple the system to a portion of the user's body.

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5. The system of Claim 1, wherein the first end is associated with a positive terminal of the power source and the second end is associated with a negative terminal of the power source.

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6. The system of Claim 1, wherein each reservoir comprises:  
a reservoir pad adapted to absorb the therapeutic agents to be delivered to the user; and  
a reservoir gasket adapted to help contain the therapeutic agents contained in the reservoir pad.

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7. The system of Claim 6, wherein the reservoir gaskets comprise a soft, flexible, foldable, FDA-approved, hypoallergenic foam material.

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8. The system of Claim 6, wherein the reservoir pads comprise a soft, flexible, foldable, absorbent, FDA-approved, hypoallergenic material.

9. The system of Claim 1, wherein the self-contained power source is a battery.

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10. The system of Claim 9, wherein the battery is a 1.55 volt battery.

11. The system of Claim 1, wherein the first electrode, the second  
5 electrode, and the power source comprise a flex-circuit.

12. The system of Claim 11, further comprising a hidden pocket disposed  
on the first or second end and adapted to house the connecting portion and at least a  
portion of the flex-circuit when the system is in the non-extended state.

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13. The system of Claim 1, wherein the system is adapted to be disposable  
after a single use.

14. The system of Claim 1, wherein the power source is insulated in a  
15 protective covering.

15. The system of Claim 14, wherein the protective covering is made from  
a polymer or gel-like substance.

20 16. The system of Claim 1, wherein the first electrode, the second  
electrode, and the power source are disposed between at least one layer of insulating  
material to protect the user's skin.

17. The system of Claim 1, wherein the system has a maximum thickness  
25 of approximately one-sixteenth of an inch.

18. A method for manufacturing a system for iontophoretic transdermal delivery of one or more therapeutic agents into a user's skin, comprising:

providing a first reservoir for containing one or more therapeutic agents;

providing a second reservoir for containing one or more therapeutic agents;

5 providing a self-contained power source for generating electric current, the power source comprising a first terminal and a second terminal;

providing a first electrode for electrically coupling the first terminal of the power source to the first reservoir, the first electrode operable to conduct electric current between the power source and the first reservoir to ionize the one or more  
10 therapeutic agents contained within the first reservoir for iontophoretic transdermal delivery into the user's skin; and

providing a second electrode for electrically coupling the second terminal of the power source to the second reservoir, the second electrode operable to conduct electric current between the power source and the second reservoir to ionize the one  
15 or more therapeutic agents contained within the second reservoir for iontophoretic transdermal delivery into the user's skin;

the system adapted to be used in an extended or non-extended state.

19. The method of Claim 18, wherein the first and second reservoirs are  
20 adapted to deliver one or more therapeutic agents to one or more portions of a user's body substantially simultaneously.

20. The system of Claim 18, further comprising providing a protective covering associated with the connecting portion and adapted to be removably coupled  
25 to a hypoallergenic adhesive on a bottom of the connecting portion, the hypoallergenic adhesive adapted to removably couple the system to a portion of the user's body.

21. The method of Claim 18, further comprising providing a protective tab associated with each reservoir, each tab adapted to be removably coupled to a hypoallergenic adhesive associated with its reservoir and further adapted to protect and provide protection from the therapeutic agents in its reservoir during application  
5 of the system to the user's skin, the hypoallergenic adhesive adapted to removably couple the system to a portion of the user's body.

22. The method of Claim 18, wherein the first end is associated with a positive terminal of the power source and the second end is associated with a negative  
10 terminal of the power source.

23. The method of Claim 18, further comprising:  
providing for each reservoir a reservoir pad adapted to absorb the therapeutic agents to be delivered to the user; and  
15 providing for each reservoir a reservoir gasket adapted to help contain the therapeutic agents contained in the reservoir pad.

24. The method of Claim 23, wherein the reservoir gaskets comprise a soft, flexible, foldable, FDA-approved, hypoallergenic foam material.  
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25. The method of Claim 23, wherein the reservoir pads comprise a soft, flexible, foldable, absorbent, FDA-approved, hypoallergenic material.

26. The method of Claim 18, wherein the self-contained power source is a  
25 battery.

27. The method of Claim 26, wherein the battery is a 1.55 volt battery.

28. The method of Claim 18, wherein the first electrode, the second  
30 electrode, and the power source comprise a flex-circuit.

29. The method of Claim 28, further comprising providing a hidden pocket disposed on the first or second end and adapted to house the connecting portion and at least a portion of the flex-circuit when the system is in the non-extended state.

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30. The method of Claim 18, wherein the system is adapted to be disposable after a single use.

31. The method of Claim 18, further comprising providing a protective  
10 covering to insulate the power source.

32. The method of Claim 31, wherein the protective covering is made from a polymer or gel-like substance.

15 33. The method of Claim 18, further comprising providing at least one layer of insulating material disposed about the first electrode, the second electrode, and the power source, the insulating material adapted to protect the user's skin.

34. The system of Claim 18, wherein the system has a maximum thickness  
20 of approximately one-sixteenth of an inch.

35. A method for delivering one or more therapeutic agents to a user through the user's skin, comprising:

positioning an iontophoretic transdermal delivery system about a portion of the user's body to receive treatment, the system adapted to be used in an extended or  
5 non-extended state and comprising:

a first end comprising a first reservoir for containing one or more therapeutic agents;

a second end comprising a second reservoir for containing one or more therapeutic agents; and

10 a connecting portion coupling the first end to the second end, the connecting portion housing:

a self-contained power source for generating electric current, the power source comprising a first terminal and a second terminal;

a first electrode for electrically coupling the first terminal of the  
15 power source to the first reservoir, the first electrode operable to conduct electric current between the power source and the first reservoir to ionize the one or more therapeutic agents contained within the first reservoir for iontophoretic transdermal delivery into the user's skin; and

a second electrode for electrically coupling the second terminal  
20 of the power source to the second reservoir, the second electrode operable to conduct electric current between the power source and the second reservoir to ionize the one or more therapeutic agents contained within the second reservoir for iontophoretic transdermal delivery into the user's skin;

the system adapted to be used in an extended or non-extended state;  
25 applying electrical current to the therapeutic agents contained in the reservoirs using the power source; and

delivering the therapeutic agents to the user through the user's skin in response to the electrical current.

36 The method of Claim 35, wherein the first and second reservoirs are adapted to deliver one or more therapeutic agents to one or more portions of a user's body substantially simultaneously.

5 37. The method of Claim 35, wherein the system further comprises a protective covering associated with the connecting portion and adapted to be removably coupled to a hypoallergenic adhesive on a bottom of the connecting portion, the hypoallergenic adhesive adapted to removably couple the system to the portion of the user's body.

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38. The method of Claim 35, wherein the system further comprises a protective tab associated with each reservoir, each tab adapted to be removably coupled to a hypoallergenic adhesive associated with its reservoir and further adapted to protect and provide protection from the therapeutic agents in its reservoir prior to  
15 application of the system to the user's skin, the hypoallergenic adhesive adapted to removably couple the system to the portion of the user's body.

39. The method of Claim 35, wherein the first end is associated with a positive terminal of the power source and the second end is associated with a negative  
20 terminal of the power source.

40. The method of Claim 35, wherein each reservoir comprises:  
a reservoir pad adapted to absorb the therapeutic agents to be delivered to the user; and  
25 a reservoir gasket adapted to help contain the therapeutic agents contained in the reservoir pad.

41. The method of Claim 40, wherein the reservoir gaskets comprise a soft, flexible, foldable, FDA-approved, hypoallergenic foam material.



42. The method of Claim 40, wherein the reservoir pads comprise a soft, flexible, foldable, absorbent, FDA-approved, hypoallergenic material.

43. The method of Claim 35, wherein the self-contained power source is a  
5 battery.

44. The method of Claim 43, wherein the battery is a 1.55 volt battery.

45. The method of Claim 35, wherein the first electrode, the second  
10 electrode, and the power source comprise a flex-circuit.

46. The method of Claim 45, wherein the system further comprises a hidden pocket disposed on the first or second end and adapted to house the connecting portion and at least a portion of the flex-circuit when the system is in the non-  
15 extended state.

47. The method of Claim 35, wherein the system is adapted to be disposable after a single use.

20 48. The method of Claim 35, wherein the power source is insulated in a protective covering.

49. The method of Claim 48, wherein the protective covering comprises a polymer or gel-like substance.

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50. The method of Claim 35, wherein the first electrode, the second electrode, and the power source are disposed between at least one layer of insulating material to protect the user's skin.

51. The method of Claim 35, wherein the system has a maximum thickness of approximately one-sixteenth of an inch.

52. An iontophoretic transdermal delivery system for delivering one or more therapeutic agents into a user's skin, comprising:

first means for containing one or more therapeutic agents;

second means for containing one or more therapeutic agents;

5 third means for generating electrical current, the third means comprising a first terminal and a second terminal;

fourth means for electrically coupling the first terminal to the first means, the fourth means operable to conduct electric current between the third means and the first means to ionize the one or more therapeutic agents contained within the first

10 means for iontophoretic transdermal delivery into the user's skin; and

fifth means for electrically coupling the second terminal to the second means, the fifth means operable to conduct electric current between the third means and the second means to ionize the one or more therapeutic agents contained within the second means for iontophoretic transdermal delivery into the user's skin;

15 the system adapted to be used in an extended or non-extended state.

53. A system for iontophoretic transdermal delivery of one or more therapeutic agents into a user's skin, comprising:

a first end comprising a first reservoir for containing one or more therapeutic agents, the first reservoir comprising:

5 a first reservoir pad adapted to absorb the therapeutic agents to be delivered to the user; and

a first reservoir gasket adapted to help contain the therapeutic agents contained in the reservoir pad;

a second end comprising a second reservoir for containing one or more therapeutic agents, the second reservoir comprising:

10 a second reservoir pad adapted to absorb the therapeutic agents to be delivered to the user; and

a second reservoir gasket adapted to help contain the therapeutic agents contained in the reservoir pad;

15 the first and second reservoirs adapted to deliver one or more therapeutic agents to one or more portions of a user's body substantially simultaneously;

a connecting portion coupling the first end to the second end, the connecting portion housing:

20 a battery for generating electric current, the battery comprising a positive terminal and a negative terminal;

a first electrode for electrically coupling the positive terminal of the power source to the first reservoir, the first electrode operable to conduct electric current between the power source and the first reservoir to ionize the one or more therapeutic agents contained within the first reservoir for iontophoretic transdermal delivery into the user's skin; and

25 a second electrode for electrically coupling the negative terminal of the power source to the second reservoir, the second electrode operable to conduct electric current between the power source and the second reservoir to ionize the one or more therapeutic agents contained within the second reservoir for iontophoretic

transdermal delivery into the user's skin, the battery, the first electrode, and the second electrode together comprising a flex-circuit; and

a hidden pocket disposed on the first or second end and adapted to house the connecting portion and at least a portion of the flex-circuit when the system is in a  
5 non-extended state.